

Patent Claims

1. Process for the coating of a catalyst support with a catalytically active coat using a coating dispersion, the catalyst support containing at least two partial structures which differ in their absorptivity for the coating dispersion, where the absorptivity of at least one partial structure is modified by precoating of the catalyst support and the catalytic coat is then applied.
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2. Process according to Claim 1, where the precoating is effected with a material which can be burnt out, evaporated and/or vaporized.
3. Process according to Claim 2, where polyvinyl alcohol, wax or a wax emulsion is used as the material which can be burnt out.
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4. Process according to Claim 2, where the precoating is effected with water.
5. Process according to Claim 2, where the precoating is effected with a water-miscible liquid.
6. Process according to Claim 5, where alcohols are used as the water-miscible liquid.
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7. Process according to Claim 2, where the precoating is effected with a water-immiscible organic liquid.
8. Process according to Claim 7, where hydrocarbons are used as the water-immiscible organic liquid.
9. Process according to any of Claims 1 to 8, where the precoating medium comprises catalytically active material and/or a precursor thereof.
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10. Process according to any of Claims 1 to 9, where the catalyst support used is a filter catalyst support which has a porous filter mat as a first partial structure and a non-porous metal foil as a second partial structure.
11. Process according to any of Claims 1 to 10, where the precoating is effected by immersion of the catalyst support in a precoating medium or by absorption of a precoating medium into the catalyst support.
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12. Process according to any of Claims 1 to 11, where the catalytic coat is dried and/or calcined after application.
13. Catalyst which can be produced by a process according to any of Claims 1 to 12.
14. Catalyst containing a catalyst support and a catalytically active coat applied thereon, the catalyst support having at least two partial structures, of which a first partial structure has a high porosity and a second partial structure a low porosity, and the catalytically active coat being present with a total mass on the catalyst support, where not more than 80% of the total mass of the coat are present on the partial structure having the high porosity.
15. Catalyst according to Claim 14, where not more than 50% of the total mass of the coat are present on the partial structure having the high porosity.
16. Catalyst according to Claim 14, where not more than 30% of the total mass of the coat are present on the partial structure having the high porosity.